# Problem D. Divisors

| | |
|---|---|
| Input file: | `standard input` |
| Output file: | `standard output` |
| Time limit: | 4 seconds |
| Memory limit: | 1024 megabytes |

Ori Badpun, a know-it-all-dwarf, taunts you with a puzzle: Algorist, eh? Knows all about *divide and conquer*, or *divide et impera*, paradigm, eh? Or perhaps you got it backwards?! How about textitimpera et divide or *conquer and divide*? Let a *permutational divisor* of a number $N$ be defined as a proper divisor (i.e., less than $N$) whose digits are a permutation of the digits of $N$ with leading zeros not allowed. Got it? I will test your skills in $T$ trials. In each, you will get a positive integer $N$, and you are to tell me how many permutational divisors it has. So, you got it now?

## Input

The first line of the input contains the number of test cases $T$.

Each of the following $T$ lines contains one natural number $N$, for which the answer needs to be determined.

**Limits** $1 \leq T \leq 100\,000$, $1 \leq N \leq 10^{18}$.

## Output

For each number from the input, print a single integer on a separate line, indicating how many permutational divisors the given number has.

## Example

| standard input | standard output |
|---|---|
| 4<br>7<br>31<br>90<br>370521 | 0<br>0<br>0<br>1 |

## Note

Number 370521 is divisible by 123507.